

# **The MasterLink**

## **Conceptual Specification**

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*Exhibit 1A*

## **MasterLink - Introducing the Concept**

The Facilities environment defines a starting point on the road to creating full-scale Cooperative Information Systems that have universal appeal in the marketplace. Facilities are common to all businesses and, therefore, cross horizontally through all vertical markets. The operation and management of physical facilities is very complex. It involves all of the elements found in even the most sophisticated manufacturing and service operations, namely:

- |                    |                             |
|--------------------|-----------------------------|
| * legacy systems   | * proprietary architectures |
| * labor management | * material management       |
| * logistics        | * customer service          |

MasterLink represents a distinct philosophy of organizational workplace management. It defines "facility" as more than a physical entity built to serve a particular purpose. A facility is any infrastructure, physical or logical, that enables enterprise activities. Enterprise endeavors are viewed as "chains of activity". These chains have specific beginnings and endings that, depending on how well they are coupled with each other, are directly related to the overall success of the enterprise.

To assist in the effort to form infrastructures needed to produce truly Cooperative Information Systems, MasterLink has created specifications for a Content Data Model that predefines a standardized view (from many perspectives) of all physical facilities. This specification is called Facilities Automation Simplification Technology (FAST). It is an object-oriented framework that is inherently an open, revisable model providing adaptive control by making user-required customizations rational and manageable.

## **MasterLink - Introducing the Concept**

FAST architecture enables the integration and coordination of corporate information resources to improve productivity and profitability. Workers, whether mobile or stationary, are given access to all information relevant to the task assigned at the point where it is needed, including:

- |                        |                        |
|------------------------|------------------------|
| * graphic instructions | * situation assessment |
| * historical data      | * diagnostic advice    |
| * schematics           | * video training       |

By the successful deployment of enriched contextual information to the point of work, MasterLink achieves work simplification, and resource optimization. The result is orders-of-magnitude improvement in organizational productive capacity and quality.

The FAST architecture can be the Master-Link used to join various specialized chains of automation common to all businesses working in facilities, such as the following:

- |                    |                       |
|--------------------|-----------------------|
| * maintenance      | * security            |
| * life/safety      | * environmental       |
| * production       | * administration      |
| * engineering      | * accounting          |
| * purchasing       | * sales               |
| * customer service | * information systems |

Facilities are the foundation on which all business activities stand. Facilities have definite boundaries, and are common to all businesses. Facilities can ultimately be the Master-Link for the architects of the information superhighway as they strive to bring global activity chains seamlessly together.

## Executive Summary

### Opportunity

The commercial facilities industry in the United States today consists of over 218,000 buildings representing **40 billion square feet** and over **\$325 billion dollars** in costs of operations. Commercial real estate is suffering from years of falling rents, declining property values, and is saddled with a hierarchial management structure (each property is a kingdom) which has always been inefficient. The greatest industry-wide deficiency is managing Variable Expenses (Cost of Operations).

These cost of operations include cleaning, utilities, maintenance/repair materials, maintenance labor, maintenance supervision, and administrative costs. Maintenance expenses are the largest component of these costs, followed by utilities and administrative costs.

Maintenance labor/supervision is the area of greatest need. Current industry "just in case" staffing practices create extremely poor skill utilization capabilities. As an example: The Property hires an electrician with Class A skill levels. However, the Class A skills are actually needed only 20% of available time. Property owners/managers see no alternatives because they do not want to be perceived by tenants/users as being "cheap" with regard to providing property services. Additionally, current computerized maintenance management systems have failed to deliver on promised efficiency improvements.

Conclusion: ***The commercial facilities market is in dire need of new technology to improve tenant/customer relations, and improve physical asset maintenance/management.***

### MasterLink Initiative

MasterLink has completed the specification for an information delivery product to specifically address the needs of commercial real estate operations management. It is called Facilities Automation Simplification Technology (FAST) and will focus initially on maintenance management. FAST is easy to implement and maintain because data acquisition is automated. FAST automatically receives, plans, and schedules all work. It dispatches workers based on owner/management defined criteria, without human intervention. Management decisions can be made "on the fly" to maximize skill utilization. FAST transmits all relevant information for the task at hand (contextual information) to mobile maintenance workers. They receive the information where work occurs via industrial strength hand-held computers. This reduces the length of time required to expedite work, and virtually eliminates manual data through-put.

None of these capabilities are available in the market today.

MasterLink optimizes resources by enhancing maintainability, availability, reliability and use of facilities (through better maintenance execution), accelerating and increasing work results (through better skills management). All measures of maintenance efficiency are improved by 15% to 30% or more. Success here will facilitate the migration of our new technology into other operating expense management.

**MasterLink redefines work effectiveness in the commercial real estate industry. The result is improved Return On Investment for facility owners and operators.**

## Executive Summary (cont'd)

### The Marketing Strategy

#### User Benefits

Market success will be driven by the following key enterprise benefits, including the following:

- \* Cost-efficient maintenance operations.
- \* The virtual elimination for the need of data input clerks related to facility maintenance.
- \* Better tenant/occupant services, with the accompanying better tenant retention capabilities.
- \* Better maintained physical facilities, with accompanying longer service life.
- \* The ability for landlords to compete more effectively on rents, due to lower variable costs.
- \* Enhanced property value due to improved Net Operating Income.
- \* The ability to implement new technology, without extensive capital outlays.

#### Economic Benefit Analysis

In the commercial real estate, the value of investment properties is derived directly from the Net Operating Income (NOI & ROI are interchangeable), which is calculated as follows:

Rental Income	(Cost of Operation) variable expenses	(Fixed Expenses)	NOI
Base Rent/Tenant Expense Contribution	cleaning, utilities, grounds, security maintenance: labor, supervision, materials administration,	real estate taxes insurance	
Market Driven: Declining	Industry-wide Premiums are Structural Today	Not Controllable	MasterLink Impact

Typical 12 story bldg. Rental Income	<u>p.s.f.</u> @\$15.00	before <u>MasterLink</u> =\$2,250,000	after <u>MasterLink</u> =\$2,250,000	MasterLink reduces Variable Expenses by 15%
Variable Expenses	@ \$ 5.67	=\$ (850,500)	=\$ (723,000)	
Fixed Expenses	@ \$ 1.89	=\$ (283,500)	=\$ (283,500)	
Total variable expenses =	\$ 7.56			
		NOI	=\$1,116,000	=\$1,243,500

To extrapolate the value of the property, extend NOI out a period of time, say 10 years, then factor in the target interest rate, say 9%, then calculate the Net Present Value (NPV)

Before MasterLink: @NPV(9%, 10yrs., income =11,160,000)= \$7,162,106

After MasterLink: 15% improvement @NPV(9%, 10yrs., income =12,435,000)= \$7,980,357

## Executive Summary (cont'd)

### Market Alliances: The Industry Gatekeepers

MasterLink will focus on specific pieces of the very large commercial real estate pie by concentrating on four basic types of facility owners and users. They are described as follows:

**Building Owners/Development/Management Firms:** These are "full-service real estate firms capable of taking buildings from inception to market, leasing and management, and often disposal too. Big-name players include Trammell Crow, Equitable RE Investment, and The Prudential. The top 100 firms in this classification control over **1.2 billion square feet** of office space.

**Building Management Firms:** The challenge of increased competition and reduced billings has given birth to a range of specialty niche managers and a new breed of national service providers. Top firms include Network Management, Koll Services, Cushman & Wakefield, JMB Realty, PM Realty, and CB Commercial. The largest 100 firms in this class control over **1.1 billion square feet** of office space.

**Government Agencies/Universities:** Not surprisingly universities, along with local, state, and federal governments, play a dominate role in the real estate market. Some of the biggest include the General Services Administration, Ogden Government Services, State University of New York, State of Missouri, and Los Angeles County. These types of agencies maintain over **1.6 billion square feet** of offices.

**Corporate Facilities Departments:** Many corporations maintain large inventories of office space to support their manufacturing, retail, or high-tech operations. Some of the bigger players include Boeing, Bell South, Deere & Company, and Wal-Mart. The top 50 in this group own and operate over **300 million square feet** of offices.

### Selling Strategy

MasterLink believes that the most efficient sales channels exist with current service providers to commercial real estate.

We believe the best are the top 10 building automation vendors. Honeywell (\$5.9 bil./sales), Johnson Controls (\$6.2 bil./sales), Barber Coleman and others that are moving rapidly into facilities maintenance outsourcing services. It is a logical extension of their relationship with their clients to do so. They are perceived as having facilities expertise and have, in most cases, have already delivered some economic benefit to building owners. Aquisition of MasterLink technology would give them signifigant competitive advantage, and give them another way to introduce their core products.

The top 100 building management firms have established extensive national networks, and are in serious need of finding better methods to deliver their services, as fee schedules continue to be depressed. Again, aquisition of MasterLink technology will give them the ability to "do more and better with less", thus improving their ability to enhance property performance and values for their clients.

Prices will be a function of the industry implementation, size and use of the facility, the equipment density, and will range from \$0.05 per square foot (p.s.f.) to more than \$1.00 p.s.f..

## Executive Summary (cont'd)

### The Product(s) or Service(s)

The MasterLink Facilities Automation Simplification Technology is a domain specific (facilities maintenance management) software application, and a software architecture that permits the seamless flow of work related information access (regardless of the data location) to and from mobile maintenance workers using hand-held computing devices. It will initially be delivered by marketing partners as a value-adding service to their clients. The technology will be licensed on a per-user, per-facility, or per-transaction basis.

MasterLink has obtained full rights to implement software that constitutes a Facilities Technology breakthrough. In cooperation with the Construction Specification Institute (CSI), MasterLink delivers a superset of the CSI long-established indexing methodology standard in object library format. MasterLink's FAST architecture ***PREDEFINES a Facility Library*** by encoding an intelligent model to maximize facility utilization factors. The FAST object framework is inherently an open, revisable model providing adaptive control by making facility changes more rational.

Selling Success will be enhanced by the following key product features/functions, including:

<u>FEATURE</u>	<u>FUNCTION/BENEFIT</u>
* <i>Open Platform System</i>	<i>Integrates With Existing MIS</i>
* <i>Object-based System</i>	<i>Easy Modifications to Customer Specs</i>
* <i>Mobile Computing Focus</i>	<i>Information Enabled Mobile Workers</i>
* <i>Workplace Objects/Customized Icons/Personal GUI</i>	<i>User Simplicity</i>
* <i>Standardized Facility Data Structures</i>	<i>Reduced Manual Data Input</i>
* <i>Diagramming &amp; Advanced Graphics Transmission</i>	<i>Work Point Information Access</i>
* <i>Expert Database Technology</i>	<i>Optimized Skill Utilization</i>
* <i>Real-Time Data Access</i>	<i>Elimination of "information float"</i>
* <i>Electronic Signature-ready Mail</i>	<i>Work Flow Adaptability</i>

MasterLink's greatest potential will be realized as an on-line Information Service for facilities owners and operators. When utilized as an Information Service, MasterLink will remove fundamental barriers to more efficient use of facilities.

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## The Facilities Industry

### Physical & Fiscal Size

There are over **218,000** buildings of at least **50,000** square feet in the United States today. Facilities are maintained in a broad spectrum of essentially *reactive* services, employed as individual owners determine their needs. Cost of maintenance, per square foot, ranges from \$0.25 to \$25.00. **Conservatively** our nation spends over **\$325 billion** dollars on those 218,000 buildings. Those expenditures do not include military or heavy manufacturing types. Exact dollar numbers are difficult to quantify because facility maintenance expenses are often hidden by allocation-accounting practices that hide true costs.

### Facilities Management

The field of Facilities Management has emerged slowly. Only in the last several years has it been recognized as an integral part of corporate strategy. That recognition was caused by two major factors:

- 1) Global competition has forced American companies to cut costs wherever they could find them. Many discovered that the old "necessary evil" facility maintenance, was a cost center that had been virtually ignored. It now deserved a closer look.
- 2) The collapse of the real estate market in the late '80's and early '90's left many companies holding excess assets that they were forced to maintain until disposal. They discovered that maintenance decisions often had a dramatic impact on the ultimate selling price. Suddenly, companies were making major business decisions on physical asset maintenance/holding cost data.

This new focus ushered in an era when Facilities Management has been elevated to a respected field, and has become a vital part of board room decision-making. Industry groups such as International Facility Management Assoc., Building Owners & Managers Assoc., Association of Industrial Plant Engineers, and others have also greatly increased American industry's collective consciousness of the need for quality facilities management.

### Barriers to Change

The industry as a whole, however, has failed to address the fundamental barriers to efficient use of facility assets, including:

- |   |                                     |
|---|-------------------------------------|
| * traditional maintenance management structures | * pervasive technology obsolescence |
| * satellite nature of building management       | * tradesmen's resistance to change  |

Facilities maintenance management techniques have changed very little in a century.

Computerized Maintenance Management Systems (CMMS) intended to make facility operations more effective, have failed to assist ownership in protecting their capital investments in facilities and have failed to meet user requirements in these key areas:

- |                                   |                              |
|-----------------------------------|------------------------------|
| * <i>implementation costs</i>     | * <i>ownership costs</i>     |
| * <i>management effectiveness</i> | * <i>worker productivity</i> |
| * <i>return on investment</i>     | * <i>worker satisfaction</i> |

## MasterLink Initiative

The MasterLink concept was created to solve specific, and chronic deficiencies in the Facilities Management industry. By compiling fragmented industry information, creating new standards, and applying our FAST architecture, MasterLink will radically change the way Facilities Management will be handled in the future.

### Facilities Automation Simplification Technology

This new technology transforms traditionally "inert", and disjointed records into "active records". Active Records provide real-time information to spawn sophisticated actions. These records, dynamically linked, become integral components involved in the work expediting process. FAST architecture will define new domains in work automation in Facilities Management, which has the stated mission:

#### **Deliver Maximum Use of Facilities and Equipment at Minimum Cost - Long Range**

We have created FAST architecture to provide enriched task information to the Work Point (point of need) with two results: order of magnitude improvement in maintenance quality and effectiveness, and reducing the length of time required to expedite work. Thus, MasterLink achieves **Work Simplification** by delivering appropriate skills, and detailed task definitions to the Work Point.

By focusing on the **Work Point** and **Work Simplification**, MasterLink has created a new approach to Facilities Management quality issues, and is articulated this way:

$$\text{Work Point Access} \times \text{Work Simplification} = \text{Resource Optimization Improvement}$$

MasterLink optimizes resources by enhancing availability and use of facilities, accelerating and increasing work results, while improving Return On Investment for facility owners and operators.

By combining our FAST architecture to achieve resource optimization, we have created products that produce Revolutionary Enterprise Benefits for Facilities Management, including:

- |   |                                    |
|---|------------------------------------|
| * <i>Standardized Data Structures</i>   | * <i>Work Point Information</i>    |
| * <i>Resource Leveling Capabilities</i> | * <i>Work Standards</i>            |
| * <i>Worker Accountability</i>          | * <i>Real-Time Information</i>     |
| * <i>Skill Optimization</i>             | * <i>Industry-specific Modules</i> |

MasterLink customers will realize major improvements, and cost savings benefits in these critical areas of Computer Aided Facilities Management:

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| * <i>Implementation Costs</i>     | * <i>CMMS/CAFM Ownership Costs</i> |
| * <i>Management Effectiveness</i> | * <i>Worker Productivity</i>       |
| * <i>Enhanced ROI Capacity</i>    | * <i>Improved Worker Morale</i>    |

## Current Software Problems - MasterLink Response

### State of the Art - Current Systems

Work Function	Current Approach	Deficiencies	MasterLink Approach
System Initiation	<p>Users are forced to create entire numbering and/or coding schema in order to define basic facility information requirements, for example:</p> <ul style="list-style-type: none"> <li>* equipment grouping/relationship</li> <li>* skill definitions</li> <li>* task/time/skill requirements</li> </ul>	<p>This requirement may consume hundreds of manhours to produce, very difficult to maintain, and is error-prone. Definitions become proprietary to the operator and dependent on his/her facility philosophy. Also, the methodology used by that staff person may not be able to accommodate future enterprise changes.</p>	<p><b>MasterLink Reduces Implementation Costs</b> by assuming that all facilities are defined by existing architectural standards. These standards are pre-defined in an intelligent, <b>Standardized Database Infrastructure</b>. The user may create <b>Industry Specific</b> equipment combinations, but the system logic remains intact.</p>
Work Reception	<p>Clerk generates hardcopy workorder (w.o.) &amp; hand delivers to planner</p>	<p>The clerk, usually not a maintenance technician, cannot fully classify work.</p>	<p>Work requestors interface with MasterLink electronically through their company computer network. The expert database prompts the caller to answer questions to determine need.</p>
Work Planning	<p>Planner subjectively defines job requirements for:</p> <ul style="list-style-type: none"> <li>* task definitions</li> <li>* skills</li> <li>* material</li> <li>* time to complete (estimate)</li> </ul>	<p>Planning is only as good as the planner on staff. There is no verifiable method to determine if the optimal combination of resources are being used.</p>	<p>MasterLink responds to each call by predefining <b>Work Standards</b>, i.e., the tasks, skills, material, and time required. That data is cross-referenced against actual performance data to select the best available personnel, thereby enabling staff <b>Skill Optimization</b>.</p>
Work Scheduling	<p>Scheduler manually manages backlog, tries to distribute work evenly.</p>	<p>Very difficult to react to changing work load.</p>	<p>MasterLink manages backlog automatically using <b>Real Time Information</b>, adjusts to changing conditions "on the fly", enabling superior <b>Resource Leveling Capabilities</b>.</p>

## Current Software Problems - MasterLink Response (cont'd)

### State of the Art - Current Systems

Work Function	Current Approach	Deficiencies	MasterLink Approach
Work Dispatch	Scheduler manually distributes hardcopy of workorder to maintenance technician.	Maintenance workers are often unavailable to receive hardcopy. Consequently, they must document their work "after the fact" which promotes incomplete data gathering.	MasterLink enables the scheduler to dispatch work requirements electronically, including <b>Diagramming</b> and <b>Advanced Graphics</b> information. Worker data is always current.
Work Execution	Worker arrives at the work site to complete the assigned task.	If any support documentation is required worker must return to base or ask for assistance.	Worker is supplied <b>ALL Work Point Information</b> needed to complete the assignment at the handheld terminal device. <b>Worker Productivity</b> is improved by eliminating non-productive searches for support data.
Work Closure	Worker returns hardcopy of workorder to receptionist who records closure data on material, crew, and time.	The <b>ONLY</b> method of data capture is manual entry which very often does not describe what was actually accomplished.	Worker presses a function key to record all information electronically, and completely. <b>Management Effectiveness</b> is maximized with availability of accurate job data.
Quality Control	The worker is relied upon to do the job he/she was dispatched to do.	No method of verifying attendance, or tasks actually completed.	<b>Worker Accountability</b> is improved by verifying attendance, and prompting the worker to record all tasks done on the handheld field unit.
Management Information	Reports are constructed from data that is often more than a few days old.	Information provided is unsophisticated, incomplete, and not current.	Provides real-time data and statistical data to make mature business decisions, resulting in <b>Improved Worker Morale</b> because the organization is more productive.

### Conclusion:

MasterLink optimizes resources by enhancing availability and use of facilities, accelerating and increasing work results, while improving **Return On Investment** for facility owners and operators, and by reducing **CMMS Ownership Costs**.

## MasterLink Products

### Application Overview

**MasterLink** is a breakthrough concept which simplifies facilities work through a unique process specification technology. When combined with remote data transmission to hand-held units, this system optimizes use of facilities and its resources in totally new ways.

The system will automatically generate work orders to be viewed by user defined criteria and assigned to individual mobile workers. The workers are linked to a network of hand-held terminals, faxes, laser printers and pagers. Unplanned work orders can be added to previously assigned schedules. The system will prioritize work by criteria which is appropriate to the craft/skill level of the worker. The system is an "intelligent engine" for work simplification and mobile worker effectiveness.

The **REUSABLE Components and Revisable Models** of the system allows the same set of architectural schema to serve a variety of work needs within vertical facility markets. The method of processing reduces human errors, enhanced motivation for human interaction - resulting in improved validation of work and sound audit trails. The system focus is on a user's viewpoint relating to industry specific resource utilization factors to maximize return on investment (ROI). Examples of this would be banking, real estate, and health care.

**Intelligent Classification** - MasterLink eliminates error-prone, tedious, and self-defeating facility administration time by not forcing users to create their own coding and classifying systems. Prior to MasterLink, that was a fundamental requirement for all CMMS/CAFM users.

**Work Point Information (WPI)**- This system will *empower* the mobile worker as never before by giving them information they need to do their job more effectively. Maintenance manuals, machine histories, parts availability, purchasing requirements, and other data, are made available to them where the work is actually being done. WPI will break the barriers of access and establish a higher availability level for all company documentation.

**Resource Leveling Functions** - This system will allow management the capability to assign/reassign resources, on an as-needed/real-time basis and incorporate labor force requirements into automated resource leveling, thus facilitate responses to any circumstance in the most cost-efficient manner possible.

## **The Products (cont'd)**

**Work Standards** - MasterLink is capable of measuring all work done against industry specific labor statistics based on the user's profile. This gives users the benefit of using internal and/or external benchmarking standards to evaluate mobile workforce performance.

**Quality Control** - This system improves quality control on an order(s) of magnitude scale (100% - 200%) in two ways:

- 1) **Work Verification** - Attendance verification is implemented by means of a bar-code scanning device attached to the remote field unit. Facility work objects have a bar-code label attached which the worker scans to verify attendance and begin the work process.
- 2) **Complete Documentation Support** - This system enables the mobile worker to make full use of all task related diagrams and graphics at the point of work. Previously, paper-based systems discouraged workers from using documentation at the job site.

Consequently, the system verifies the mobile worker's attendance at the proper location, provides remote documentation usage, and accommodates accurate work measurement of all assigned tasks.

**Skill Optimization** - MasterLink schedules personnel resources that best utilizes departmental skills. by matching worker's abilities and availability to work object requirements,. The result is a maximized team effort.

**User Simplicity** - MasterLink consists of six operating modules, and a Master menu. Access is accomplished by "point & shoot" activation to all functions in terms of:

*	<b>Work Targets</b>	called	<b>FastBase</b>
*	<b>Work Resources</b>	called	<b>FastTrack</b>
*	<b>Work Scheduler</b>	expedited by	<b>FastTalk</b>

Work Targets are things or tasks requiring action, Resources are the people or material required to accomplish the action, and jobs are the successful combination of objects and resources. Everything in MasterLink is defined in terms of this simple relationship, thus making it easier for users to interact with the system.

## The Products (cont'd)

MasterLink has obtained full rights to implement software that constitutes a Facilities Technology breakthrough. In cooperation with the Construction Specification Institute (CSI), MasterLink delivers a superset of the CSI long-established indexing methodology standard in object library format.

MasterLink's FAST architecture ***PREDEFINES a Facility Library*** by encoding an intelligent model to maximize facility utilization factors. The FAST object framework is inherently an open, revisable model providing adaptive control by making facility changes more rational. Changes are made **dynamically** through a visual diagramming tool that automatically **generates error-free computer code** activating facility definitions and applications.

### The Facilities Framework

MasterLink's FAST Architecture is an object-oriented framework. Let's be clear about defining the term framework - a set of classification libraries encompassing the resources of the facilities domain arranged in the following categories:

The Facilities Framework	Framework Benefits
An Inheritance Hierarchy	Work requirements and Work Point Information are derived through logical groupings inherent in existing architectural coding schema, and implemented by MasterLink's Facilities Automation Simplification Technology (FAST).
An Encoded Model	Defines a dynamic relationship between <u>resources</u> in the framework, and rules governing their use.
A Visual Diagramming Tool	Communicates with Facilities users through detailed graphical symbols that illustrate decision logic in facility resource management.

The MasterLink Libraries/Frameworks will be marketed to companies developing products that have and impact on the facilities industry.

## The Products (cont'd)

MasterLink has identified critical success factors to develop its technical architecture (FAST) that may be introduced as a **Packaged Software Solution** to the general facilities industry. This architecture defines the complete MasterLink initiative. Its goals and purpose are to maximize facility utilization and work simplification by the first integration of complimentary technologies: Object-Oriented analysis and design, and client/server technology. The following table summarizes the highlights of critical success factors, conceptual functionality, and facility benefits:

Critical Success Factor	MasterLink Functions	Facilities Benefits
End User Focus	<p>Customization of Graphical User Interface, based on user viewpoint:</p> <ul style="list-style-type: none"> <li>* Customized Facility Icons</li> <li>* Context Sensitive Help</li> <li>* Expert Documentation Support</li> </ul>	<ul style="list-style-type: none"> <li>* Improved Customer Satisfaction/Morale</li> <li>* Improved Access to Facilities Documentation</li> <li>* Online Training and Support Capabilities</li> </ul>
Network Transparency	<ul style="list-style-type: none"> <li>* Local Area and Wide Area connectivity solutions are integrated in a facilities management focus</li> <li>* Consistent, enterprise-wide graphical object interface</li> </ul>	<ul style="list-style-type: none"> <li>* Overcomes the communications gap inherent with real estate satellite operations.</li> <li>* Standardized facility descriptors</li> </ul>
Corporate Productivity	<ul style="list-style-type: none"> <li>* Automatic facility trouble evaluation, resulting in deployment of corporate resources</li> <li>* Least-cost skills routing to rectify problems</li> </ul>	<ul style="list-style-type: none"> <li>* Accelerated information utilization</li> <li>* Real-time access to management critical information</li> <li>* Cost-effective skill deployment</li> </ul>
Team Membership	<ul style="list-style-type: none"> <li>* "Active Document" architecture activates automated reporting systems</li> <li>* Electronic Forms enabling signature-ready document management capabilities</li> </ul>	<ul style="list-style-type: none"> <li>* Improved reporting and transaction accuracy</li> <li>* Real-time supplies and material reorder</li> </ul>
Business Leverage	<ul style="list-style-type: none"> <li>* Rapid customization capabilities</li> <li>* Advanced client/server architecture</li> </ul>	<ul style="list-style-type: none"> <li>* Higher adaptability to facility users' needs</li> <li>* Higher integration with existing enterprise information systems</li> </ul>



## The Products (cont'd)

### Facilities Technology Integration Platform

MasterLink's frameworks enable Facilities Technology (energy management, life safety, etc.), and Facilities Outsourcing companies to "plug and play" their systems into their customers' existing enterprise information systems. The incentives for these companies to use MasterLink's FAST architecture frameworks are summarized in the following table:

End-User Requirements	MasterLink Capabilities	Benefits to Technology Companies & Their Clients
Freedom of Choice	<ul style="list-style-type: none"> <li>* Open systems commitment</li> <li>* Computer language independent</li> <li>* Computer operating system independent</li> </ul>	* Maximum integration of existing MIS investment
Adaptable Systems	* Provides a full range of facilities solutions, from outsourcing to complete systems integration	* Maximize ROI by providing competitive infrastructure

### A Facilities Information Service

MasterLink's greatest potential will be realized as an on-line Information Service for facilities owners and operators. When utilized as an Information Service, MasterLink will remove fundamental barriers to more efficient use of facilities, including:

Barriers to Change	MasterLink Solutions
Traditional Maintenance Management Structures	By making maintenance management information accessible and understandable, MasterLink enables corporate management to make decisions based on fact. Staffing and budget allocations are no longer determined by "Rules of Thumb", eliminating unneeded personnel density on the maintenance staff.
Pervasive Technology Obsolescence	MasterLink, implemented as an information service, eliminates the need for capital investment in rapidly advancing hardware and software technology by providing customers the most recent versions of both by subscription.
Satellite Nature of Building Management	MasterLink will maintain the inter-office connectivity network for the client.
Tradesmen's Resistance to Change	MasterLink enables the mobile maintenance worker with tools to make him more productive, not more burdened. Acceptance of this technology is driven by a high self-esteem realization.